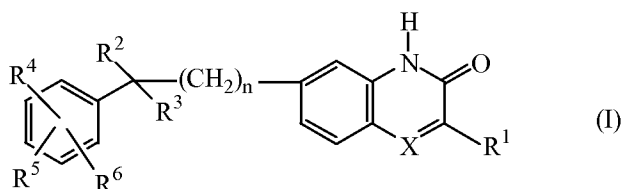


Listing of Claims:

This listing of claims replaces all prior versions, and listings, of claims in the captioned application.

1. (Original) A compound of formula (I),



the *N*-oxide forms, the addition salts and the stereo-chemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR⁷, wherein R⁷ is hydrogen or taken together with R¹ may form a bivalent radical of formula -CH=CH-CH=CH-;

R¹ is C₁₋₆alkyl or thienyl;

R² is hydrogen, hydroxy, C₁₋₆alkyl, C₃₋₆alkynyl or taken together with R³ may form =O;

R³ is a radical selected from

- (CH₂)_s- NR⁸R⁹ (a-1),
- O-H (a-2),
- O-R¹⁰ (a-3),
- S- R¹¹ (a-4), or
- C≡N (a-5),

wherein

s is 0, 1, 2 or 3;

R⁸ is -CHO, C₁₋₆alkyl, hydroxyC₁₋₆alkyl, C₁₋₆alkylcarbonyl, di(C₁₋₆alkyl)aminoC₁₋₆alkyl, C₁₋₆alkyloxyC₁₋₆alkyl, C₁₋₆alkylcarbonylaminoC₁₋₆alkyl, piperidinylC₁₋₆alkyl, piperidinylC₁₋₆alkylaminocarbonyl, C₁₋₆alkyloxy, thienylC₁₋₆alkyl, pyrrolylC₁₋₆alkyl, arylC₁₋₆alkylpiperidinyl, arylcarbonylC₁₋₆alkyl, arylcarbonylpiperidinylC₁₋₆alkyl, haloindozolylpiperidinylC₁₋₆alkyl, or arylC₁₋₆alkyl(C₁₋₆alkyl)aminoC₁₋₆alkyl;

R^9 is hydrogen or C_{1-6} alkyl;

R^{10} is C_{1-6} alkyl, C_{1-6} alkylcarbonyl or di(C_{1-6} alkyl)amino C_{1-6} alkyl; and

R^{11} is di(C_{1-6} alkyl)amino C_{1-6} alkyl;

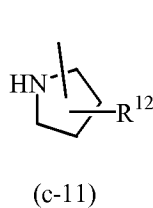
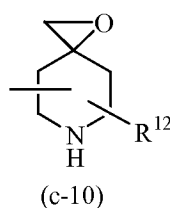
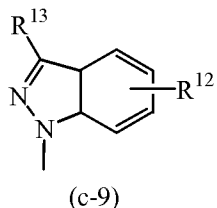
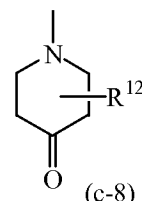
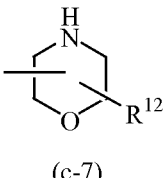
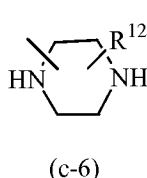
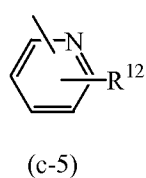
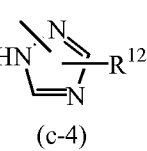
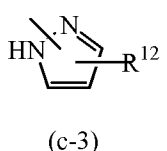
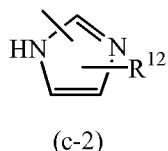
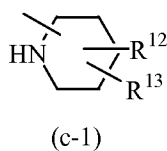
or R^3 is a group of formula



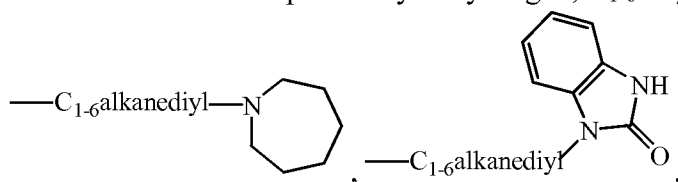
wherein

t is 0, 1, 2 or 3;

Z is a heterocyclic ring system selected from



wherein each R^{12} independently is hydrogen, C_{1-6} alkyl, aminocarbonyl, hydroxy,



C_{1-6} alkyloxy C_{1-6} alkyl, C_{1-6} alkyloxy C_{1-6} alkylamino, di(phenyl C_{2-6} alkenyl), piperidinyl C_{1-6} alkyl,

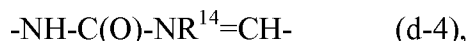
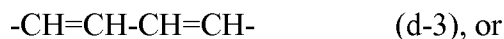
C_{3-10} cycloalkyl, C_{3-10} cycloalkyl C_{1-6} alkyl,

aryloxy(hydroxy) C_{1-6} alkyl, haloindazolyl, aryl C_{1-6} alkyl, aryl C_{2-6} alkenyl, morpholino, C_{1-6} alkylimidazolyl, or pyridinyl C_{1-6} alkylamino; and

each R^{13} independently is hydrogen, piperidinyl or aryl;

R^4 , R^5 and R^6 are each independently selected from hydrogen, halo, trihalomethyl, trihalomethoxy, C_{1-6} alkyl, C_{1-6} alkyloxy, di(C_{1-6} alkyl)amino, di(C_{1-6} alkyl)amino C_{1-6} alkyloxy or C_{1-6} alkyloxycarbonyl; or

when R^5 and R^6 are on adjacent positions they may taken together form a bivalent radical of formula



wherein R^{14} is C_{1-6} alkyl;

aryl is phenyl or phenyl substituted with halo, C_{1-6} alkyl or C_{1-6} alkyloxy;

with the proviso that when

n is 0, X is N, R^1 is C_{1-6} alkyl, R^2 is hydrogen, R^3 is a group of formula (b-1), t is 0, Z is the heterocyclic ring system (c-2) wherein said heterocyclic ring system Z is attached to the rest of the molecule with a nitrogen atom, and R^{12} is hydrogen; then

at least one of the substituents R^4 , R^5 or R^6 is other than hydrogen, halo, C_{1-6} alkyl or C_{1-6} alkyloxy.

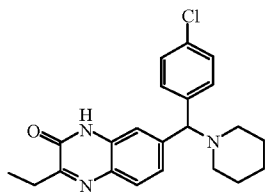
2. (Original) A compound as claimed in claim 1 wherein

n is 0 or 1; X is N or CR^7 , wherein R^7 is hydrogen; R^1 is C_{1-6} alkyl; R^2 is hydrogen; R^3 is a radical selected from (a-1) or (a-2) or is group of formula (b-1); s is 0, 1 or 2; R^8 is C_{1-6} alkyl or aryl C_{1-6} alkyl(C_{1-6} alkyl)amino C_{1-6} alkyl; t is 0, 1 or 2; Z is a heterocyclic ring system selected from (c-1), (c-2), (c-3), (c-4), (c-5) or (c-11); each R^{12} independently is hydrogen or C_{1-6} alkyloxy C_{1-6} alkylamino; each R^{13} independently is hydrogen; and R^4 , R^5 and R^6 are each independently selected from hydrogen, halo or C_{1-6} alkyl.

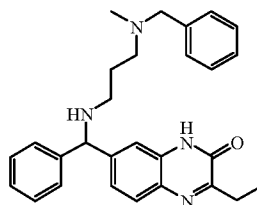
3. (Previously Presented) A compound according to claim 1 wherein

n is 0 or 1; X is N; R^1 is C_{1-6} alkyl; R^2 is hydrogen; R^3 is a radical of formula (a-1) or is a group of formula (b-1); s is 0; R^8 is aryl C_{1-6} alkyl(C_{1-6} alkyl)amino C_{1-6} alkyl; t is 0; Z is a heterocyclic ring system selected from (c-1) or (c-2); each R^{12} independently is hydrogen or C_{1-6} alkyloxy C_{1-6} alkylamino; each R^{13} independently is hydrogen; and R^4 , R^5 and R^6 are each independently selected from hydrogen or halo.

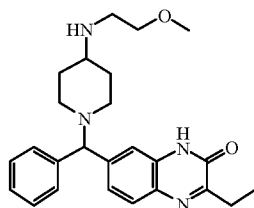
4. (Currently Amended) A compound selected from compound No 5, compound No 9, compound No 2 and compound No 1:



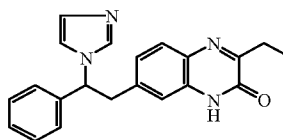
compound 5;



compound 9
.C₂H₂O₄ (1:2) ;



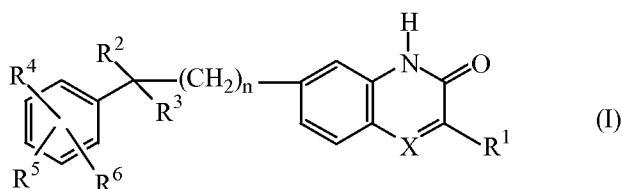
compound 2
.C₂H₂O₄ (2:5) ; and



compound 1 .

and the *N*-oxide forms, the addition salts and the stereo-chemically isomeric forms thereof.

5. (Cancelled)
6. (Previously Presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and as an active ingredient a therapeutically effective amount of a compound according to claim 1.
7. (Cancelled)
8. (Currently Amended) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of formula (I)



the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereo-chemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR⁷, wherein R⁷ is hydrogen or taken together with R¹ may form a bivalent radical of formula -CH=CH-CH=CH-;

R¹ is C₁₋₆alkyl or thienyl;

R² is hydrogen, hydroxy, C₁₋₆alkyl, C₃₋₆alkynyl or taken together with R³ may form =O;

R³ is a radical selected from

- (CH₂)_s- NR⁸R⁹ (a-1),
- O-H (a-2),
- O-R¹⁰ (a-3),
- S- R¹¹ (a-4), or
- C≡N (a-5),

wherein

s is 0, 1, 2 or 3;

R⁸ is -CHO, C₁₋₆alkyl, hydroxyC₁₋₆alkyl, C₁₋₆alkylcarbonyl, di(C₁₋₆alkyl)aminoC₁₋₆alkyl, C₁₋₆alkyloxyC₁₋₆alkyl, C₁₋₆alkylcarbonylaminoC₁₋₆alkyl, piperidinylC₁₋₆alkyl, piperidinylC₁₋₆alkylaminocarbonyl, C₁₋₆alkyloxy, thienylC₁₋₆alkyl, pyrrolylC₁₋₆alkyl, arylC₁₋₆alkylpiperidinyl, arylcarbonylC₁₋₆alkyl, arylcarbonylpiperidinylC₁₋₆alkyl, haloindozolylpiperidinylC₁₋₆alkyl, or arylC₁₋₆alkyl(C₁₋₆alkyl)aminoC₁₋₆alkyl;

R⁹ is hydrogen or C₁₋₆alkyl;

R¹⁰ is C₁₋₆alkyl, C₁₋₆alkylcarbonyl or di(C₁₋₆alkyl)aminoC₁₋₆alkyl; and

R¹¹ is di(C₁₋₆alkyl)aminoC₁₋₆alkyl;

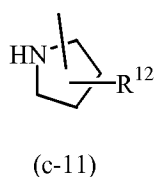
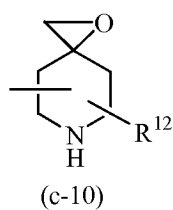
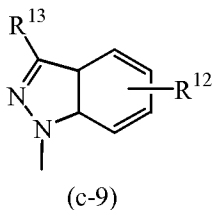
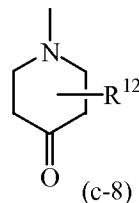
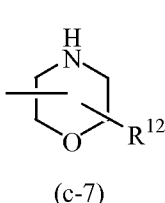
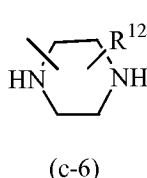
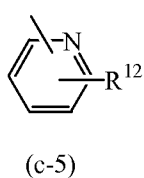
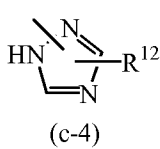
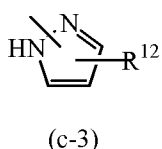
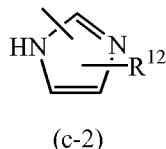
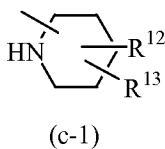
or R³ is a group of formula



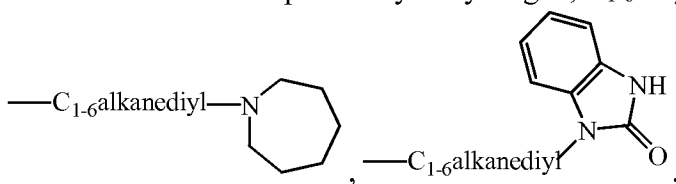
wherein

t is 0, 1, 2 or 3;

Z is a heterocyclic ring system selected from



wherein each R^{12} independently is hydrogen, C_{1-6} alkyl, aminocarbonyl, hydroxy,



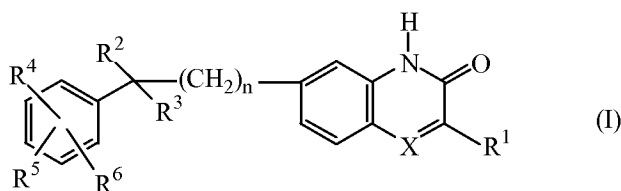
C_{1-6} alkyloxy C_{1-6} alkyl, C_{1-6} alkyloxy C_{1-6} alkylamino, di(phenyl C_{2-6} alkenyl), piperidinyl C_{1-6} alkyl, C_{3-10} cycloalkyl, C_{3-10} cycloalkyl C_{1-6} alkyl, aryloxy(hydroxy) C_{1-6} alkyl, haloindazolyl, aryl C_{1-6} alkyl, aryl C_{2-6} alkenyl, morpholino, C_{1-6} alkylimidazolyl, or pyridinyl C_{1-6} alkylamino; and each R^{13} independently is hydrogen, piperidinyl or aryl;

R^4 , R^5 and R^6 are each independently selected from hydrogen, halo, trihalomethyl, trihalomethoxy, C_{1-6} alkyl, C_{1-6} alkyloxy, di(C_{1-6} alkyl)amino, di(C_{1-6} alkyl)amino C_{1-6} alkyloxy or C_{1-6} alkyloxycarbonyl; or when R^5 and R^6 are on adjacent positions they may taken together form a bivalent radical of formula

- O-CH₂-O (d-1),
 -O-(CH₂)₂-O- (d-2),
 -CH=CH-CH=CH- (d-3), or
 -NH-C(O)-NR¹⁴=CH- (d-4),
 wherein R¹⁴ is C₁₋₆alkyl;

aryl is phenyl or phenyl substituted with halo, C₁₋₆alkyl or C₁₋₆alkyloxy.

9. (Cancelled)
10. (Previously Presented) A method for enhancing the effectiveness of chemotherapy of comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .
11. (Previously Presented) A method for enhancing the effectiveness of radiotherapy of comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy .
12. (Original) A combination of a compound of formula (I) with a chemotherapeutic agent



the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereo-chemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR⁷, wherein R⁷ is hydrogen or taken together with R¹ may form a bivalent radical of formula -CH=CH-CH=CH-;

R^1 is C_{1-6} alkyl or thienyl;

R^2 is hydrogen, hydroxy, C_{1-6} alkyl, C_{3-6} alkynyl or taken together with R^3 may form $=O$;

R^3 is a radical selected from

- $-(CH_2)_s- NR^8R^9$ (a-1),
- $-O-H$ (a-2),
- $-O-R^{10}$ (a-3),
- $-S- R^{11}$ (a-4), or
- $-C\equiv N$ (a-5),

wherein

s is 0, 1, 2 or 3;

R^8 , R^{10} and R^{11} are each independently selected from $-CHO$, C_{1-6} alkyl, hydroxy C_{1-6} alkyl, C_{1-6} alkylcarbonyl, amino, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino C_{1-6} alkyl, C_{1-6} alkyloxycarbonyl, C_{1-6} alkylcarbonylamino C_{1-6} alkyl, piperidinyl C_{1-6} alkylaminocarbonyl, piperidinyl, piperidinyl C_{1-6} alkyl, piperidinyl C_{1-6} alkylaminocarbonyl, C_{1-6} alkyloxy, thienyl C_{1-6} alkyl, pyrrolyl C_{1-6} alkyl, aryl C_{1-6} alkylpiperidinyl, arylcarbonyl C_{1-6} alkyl, arylcarbonylpiperidinyl C_{1-6} alkyl, haloindozolylpiperidinyl C_{1-6} alkyl, or aryl C_{1-6} alkyl(C_{1-6} alkyl)amino C_{1-6} alkyl; and

R^9 is hydrogen or C_{1-6} alkyl;

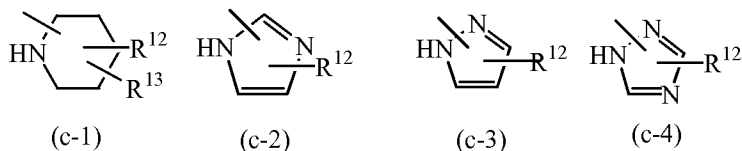
or R^3 is a group of formula

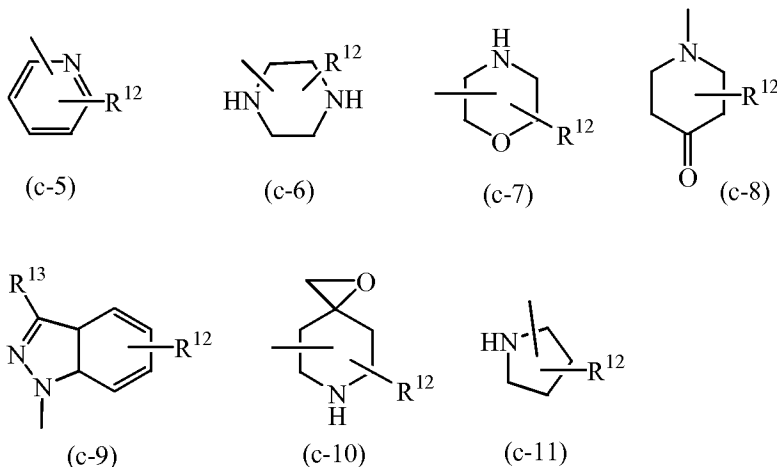


wherein

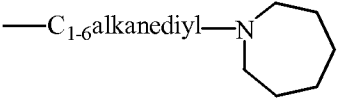
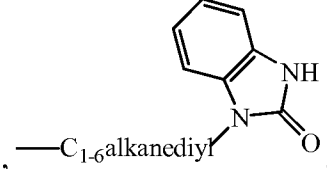
t is 0, 1, 2 or 3;

Z is a heterocyclic ring system selected from

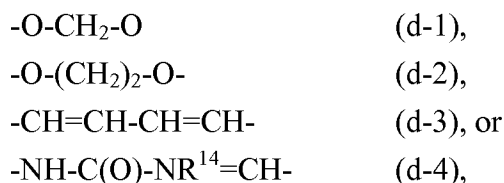




wherein each R^{12} independently is hydrogen, halo, C_{1-6} alkyl, aminocarbonyl, amino, hydroxy,

aryl, , , C_{1-6} alkylamino C_{1-6} alkyloxy, C_{1-6} alkyloxy C_{1-6} alkyl, C_{1-6} alkyloxy C_{1-6} alkylamino, aryl C_{1-6} alkyl, di(phenyl C_{2-6} alkenyl), piperidinyl, piperidinyl C_{1-6} alkyl, C_{3-10} cycloalkyl, C_{3-10} cycloalkyl C_{1-6} alkyl, aryloxy(hydroxy) C_{1-6} alkyl, haloindazolyl, aryl C_{1-6} alkyl, aryl C_{2-6} alkenyl, aryl C_{1-6} alkylamino, morpholino, C_{1-6} alkylimidazolyl, or pyridinyl C_{1-6} alkylamino; each R^{13} independently is hydrogen, piperidinyl or aryl;

R^4 , R^5 and R^6 are each independently selected from hydrogen, halo, trihalomethyl, trihalomethoxy, C_{1-6} alkyl, C_{1-6} alkyloxy, amino, amino C_{1-6} alkyl, di(C_{1-6} alkyl)amino, di(C_{1-6} alkyl)amino C_{1-6} alkyloxy or C_{1-6} alkyloxycarbonyl, or C_{1-6} alkyl substituted with 1, 2 or 3 substituents independently selected from hydroxy, C_{1-6} alkyloxy, or amino C_{1-6} alkyloxy; or when R^5 and R^6 are on adjacent positions they may taken together form a bivalent radical of formula

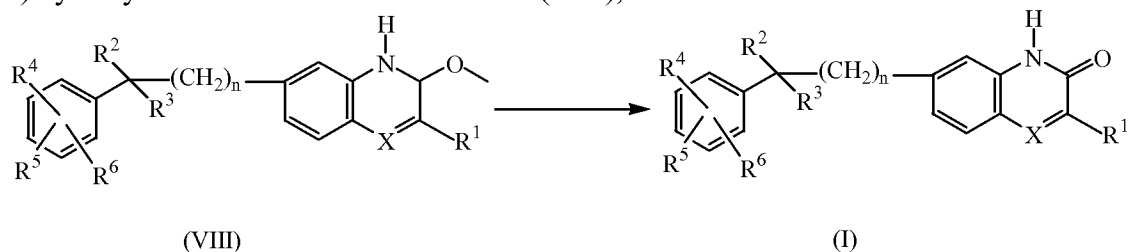


wherein R^{14} is C_{1-6} alkyl;

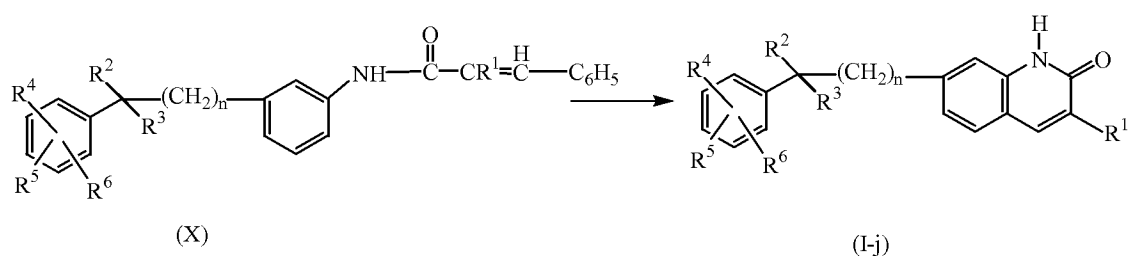
aryl is phenyl or phenyl substituted with halo, C_{1-6} alkyl or C_{1-6} alkyloxy.

13. (Previously Presented) A process for preparation of a compound as claimed in claim 1, comprising

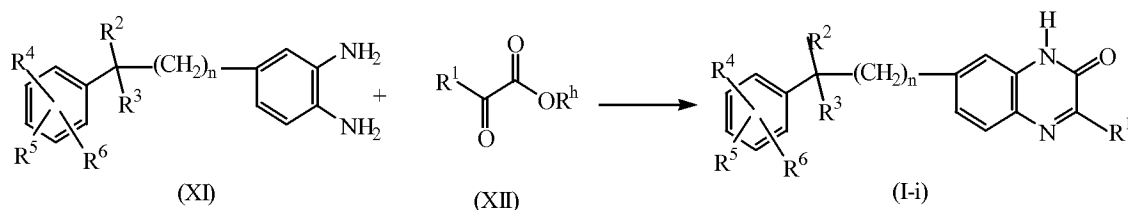
a) hydrolysis of intermediates of formula (VIII),



b) cyclization of intermediates of formula (X), into compounds of formula (I) wherein X is CH, herein referred to as compounds of formula (I-j) , and s.



c) condensation of an appropriate ortho-benzenediamine of formula (XI) with an ester of formula (XII) wherein R^h is C₁₋₆alkyl, into compounds of formula (I), wherein X is N, herein referred to as compounds of formula (I-i), in the presence of a carboxylic acid.



14. (New) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 2.

15. (New) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 3.

16 (New) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 4.

17. (New) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 2.

18. (New) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 2, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .

19. (New) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 2, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.

20. (New) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 3.

21. (New) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 3, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .

22. (New) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 3, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.

23. (New) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 4.
24. (New) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 4, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .
25. (New) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 4, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.
- 26 (New) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 2.
- 27 (New) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 3.
- 28 (New) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 4.
29. (New) A product made by the process of claim 13.
30. (New) A pharmaceutical composition made by the process of claim 13.